

RESPONSE TO OFFICE ACTION  
Serial N . 09/982,406  
Page 2 of 18

**IN THE CLAIMS**

1. (Currently Amended) An apparatus Apparatus for supporting a substrate in a chamber having at least one substrate support member coupled to the chamber, comprising:
  - a body having a first portion and a second portion, the first portion adapted to interface with the support member;
  - a socket disposed in the second portion and having a ball support surface; and
  - a ball rotatably disposed on the ball support surface in the socket, wherein the ball is at least one of coated or plated, the ball adapted to contact and support a substrate thereon.
2. (Previously Presented) The apparatus of claim 1, wherein the ball has a surface roughness of 4 micro-inches or smoother.
3. (Original) The apparatus of claim 1, wherein the ball is coated or plated with chromium, an aluminum alloy, silicon nitride, or tungsten nitride.
4. (Original) The apparatus of claim 1, wherein the ball support surface has a radius greater than a radius of the ball.
5. (Withdrawn) The apparatus of claim 1, wherein the ball support surface is conical.
6. (Withdrawn) The apparatus of claim 1, wherein the ball support surface further comprises:
  - at least one depression or groove; and
  - a plurality of ball support balls disposed in the depression or groove that support the ball.

255664

RESPONSE TO OFFICE ACTION  
Serial No. 09/982,406  
Page 3 of 18

7. (Withdrawn) The apparatus of claim 1 further comprising:  
a plurality of ball support balls disposed between the ball support surface and the ball.
8. (Currently Amended) An apparatus ~~Apparatus~~ for supporting a glass substrate, comprising:  
a chamber body having at least one substrate access port;  
at least one support member disposed in the chamber body; and  
one or more balls disposed on a first side of the support member, the balls rotatably adapted to support the glass substrate in a spaced-apart relation to the support member.
9. (Original) The apparatus of claim 8 further comprising:  
a spacer having a first portion and a second portion, the first portion disposed on the support member and the second portion having a socket that rotatably retains the ball therein.
10. (Original) The apparatus of claim 9, wherein the socket further comprises:  
a ball support disposed inside a cylindrical sidewall.
11. (Original) The apparatus of claim 10, wherein the ball support further comprises:  
a curved surface having a single contact point with the ball.
12. (Withdrawn) The apparatus of claim 10, wherein the ball support further comprises:  
a conical surface contacting the ball.
13. (Original) The apparatus of claim 10, wherein the ball support centers the ball within the socket.

255664

**RESPONSE TO OFFICE ACTION****Serial No. 09/982,406****Page 4 of 18**

14. (Original) The apparatus of claim 8, wherein the ball has a surface roughness of 4 micro-inches or smoother.
15. (Original) The apparatus of claim 9 further comprising:  
a plurality of mounting pins coupled to the support member, each pin coupled to a respective spacer.
16. (Original) The apparatus of claim 15, wherein the first portion is hollow and receives at least a portion of the mounting pin.
17. (Original) The apparatus of claim 8, wherein at least one of the balls is positioned to support a center portion of the substrate.
18. (Original) The apparatus of claim 8, wherein some of the balls support a perimeter portion of the substrate and at least one of the balls is positioned to support a center portion of the substrate.
19. (Original) The apparatus of claim 8, wherein a plurality of spacers having fixed top surfaces support a perimeter portion of the substrate and at least one of the balls is positioned to support a center portion of the substrate.
20. (Previously Presented) The apparatus of claim 8, wherein the balls are coated or plated.
21. (Original) The apparatus of claim 8, wherein the balls are coated or plated chromium, an aluminum alloy, silicon nitride, or tungsten nitride.

RESPONSE TO OFFICE ACTION  
Serial No. 09/982,406  
Pag 5 of 18

22. (Withdrawn) The apparatus of claim 8, wherein each support member further comprises:

a plurality of ball support balls disposed between the support member and the ball.

23-46. (Cancelled)

47. (Previously Presented) Apparatus for supporting a substrate in a chamber having at least one substrate support member coupled to the chamber, comprising:

a body having a first portion and a second portion, the first portion adapted to interface with the support member;

a socket disposed in the second portion and having a ball support surface; and

a ball rotatably disposed on the ball support surface in the socket, wherein the ball has a surface roughness of 4 micro-inches or smoother, the ball adapted to contact and support a substrate thereon.

48. (Previously Presented) The apparatus of claim 47, wherein the ball is electropolished.

49. (Previously Presented) The apparatus of claim 47, wherein the ball is at least one of coated or plated.

50. (Previously Presented) The apparatus of claim 49, wherein the ball is coated or plated with chromium, an aluminum alloy, silicon nitride, or tungsten nitride.

51. (Previously Presented) The apparatus of claim 47, wherein the ball support surface has a radius greater than a radius of the ball.

255664

**RESPONSE TO OFFICE ACTION**  
**Serial No. 09/982,406**  
**Page 6 of 18**

52. (Previously Presented) The apparatus of claim 8, wherein the balls are electropolished.

53. (Previously Presented) The apparatus of claim 8, further comprising:  
a cassette movably disposed within the chamber, wherein the at least one support member further comprises a plurality of support members coupled to the cassette; and  
a heating element coupled to at least a first support member of the plurality of support members.

54. (Previously Presented) The apparatus of claim 53, further comprising:  
a plurality of substrate support posts coupled to the first side of the support member outward of the one or more balls.

55. (Previously Presented) The apparatus of claim 53, wherein each of the one or more balls is at least one of coated or plated.

56. (Previously Presented) The apparatus of claim 8, further comprising:  
a least two substrate access ports disposed on opposite sides of the chamber;

57. (Currently Amended) The apparatus of claim ~~55~~ 56, further comprising:  
a plurality of substrate support posts coupled to the first side of the support member outward of the one or more balls.

58. (Previously Presented) The apparatus of claim 56, wherein each of the one or more balls is at least one of coated or plated.

**RESPONSE TO OFFICE ACTION**

**Serial No. 09/982,406**

**Page 7 of 18**

59. (New) The apparatus of claim 8, further comprising:

a cassette movably disposed within the chamber, wherein the at least one support member further comprises a plurality of support members coupled to the cassette; and

a cooling plate disposed within the chamber.

255664